

The external costs of Pesticide use

The health costs The environment costs The economic costs

The Environmental costs

 $\mathsf{PAN},$ IBMA and IOBC have held annual symposia on the need to implement IPM from 2012 through to this year.

Several scientific presentations on the cost to the environment and European soils.

From 2018:

INRA: Earthworms; Celine Pelosi, Funghi and Bacteria; Fabrice Martin-Laurent

 ${\tt JRC}$: Soil threats in Europe: status, methods, drivers and effects on ecosystem services; Luca Montanarella

Michael Hamell, Chair: "Finally, efforts at all levels to promote SOIL PROTECTION must continue. This symposium, providing updated and new evidence of the decline of soil functions, has painted a deeply worrying picture of the state of soils (particularly arable) in the EU and far beyond. The approach to soil within IPM, while by no means the complete picture, goes some way towards improving protection but it is again time to revisit

comprehensive soil protection from an EU policy perspective and so redress the $% \left({{\rm missed}} \right)$ missed opportunities of the past decade."

The Human Health costs

MPPP Task Force Press Conference 31 March 2022

Head Parkinson's Society Netherlands, Dr Jobien Wind, personal experience of contracting and living with Parkinson's disease.

Professor Bastiaan Bloem, Radbound University Nijmegen Medical Centre, 2020 - Over next 20 years the number of people with Parkinson's disease will likely double from 6.5 million to 13 million mainly from widespread exposure to pesticides and other chemicals used in agriculture and manufacturing.

These people need to be taken seriously EFSA have invited Prof. Bloem to work and further investigate the links between pesticide exposure and Parkinson's disease.

The Economic costs

Costs directly attributable to pesticides

€2.3 billion (2017)

Net Profit of Pesticide industry €0.9 billion (2017)

Who benefits?

Consumers – No, cost of food has risen x 5 since 1960s.

Farmers – No, commodity prices have fallen as has the share that farmers receive whilst farm intensification and expansion has occurred. Not a model for a balanced society!

Ref. Basic Pesticides: A model that's costing us dearly November 30^{th} 2021

The Voice of the EU People via an ECI

1 million European signatures to Save Bees and Farmers validated and the ECI declared by the European Commission as successful.

Phasing out of 80% of the use of synthetic pesticides by 2030 & 100% by 2035

Restoration of biodiversity on agricultural land

Financial support for farmers to transition towards ecological practices

"Farmers and science have shown that agroecology can feed the world without chemicals. It is high time our politicians stop listening to agribusiness and start to work for the future of our children." Martin Dermine, Executive Director PAN Europe

This ECI and its message is not only relevant to politicians but bureaucrats, regulators and advisors the need to rebalance is being spoken loud and clear!

Rebalancing between chemicals and biology

United Nations Global Land Outlook 2022: Up to 40% of lands on earth are already degraded from overuse of synthetic pesticides and fertilisers.

China provides clear example of government forced to rebalance.

In the EU rebalancing there is a need to ensure that microbials and other safe biological alternatives to pesticides are rapidly made available and that the EC and MS fund training courses for EU farmers and advisors not just training national experts, drawing on the scientific and industrial expertise of biocontrol community.

When is it needed - NOW!!!